## **AMENDMENTS TO THE CLAIMS:**

The listing of claims will replace all prior versions, and listings, of claims in the application:

## **LISTING OF CLAIMS:**

- 1.-25. (Canceled)
- 26. (Amended) A blow-molded dimensionally stable polymeric medical balloon having an inflated configuration at an inflation pressure with a shape corresponding to an inner surface of a balloon mold and an inflated outer diameter radial shrinkage of greater than 0% and less than 10% as measured by a percent change between the inflated configuration outer diameter at the inflation pressure at a substantially ambient temperature in the balloon mold used to blow-mold the balloon and the inflated configuration outer diameter at the inflation pressure at the substantially ambient temperature inflation conditions otherwise the same but as part of a catheter system after exposure to a shrinking treatment which causes the radial shrinkage, the balloon having been formed by a process prior to exposure to the shrinking treatment, the process including heat-setting the inflated balloon in the balloon mold using a heating member which applies heat to the balloon simultaneously along the length of the balloon and cooling the inflated balloon to substantially ambient temperature within the mold after the heat-setting, so that the balloon inflated outer diameter radial shrinkage is less than an inflated outer diameter radial shrinkage of a balloon heat-set nonuniformly.
  - 27. (Canceled)

- 28. (Previously presented) The polymeric balloon of claim 26 wherein the radial shrinkage is less than about 6%.
- 29. (Previously presented)The polymeric balloon of claim 26 wherein the radial shrinkage is less than about 4%.
- 30. (Previously presented) The polymeric balloon of claim 26 wherein the balloon has an inflated length axial growth of less than about 10% as measured by a difference between the inflated length of the balloon at the ambient temperature in the balloon mold during blow-molding of the balloon and the inflated length of the balloon at the ambient temperature as part of the catheter system after exposure to the thermal treatment.
- 31. (Previously presented) The polymeric balloon of claim 30 wherein the axial growth is less than about 6%.
- 32. (Previously presented) The polymeric balloon of claim 30 wherein the axial growth is less than about 4%.
- 33. (Previously presented) The polymeric balloon of clam 26 wherein the balloon is formed at least in part of a polyurethane.
- 34. (Previously presented) The polymeric balloon of claim 26 having a length of about 0.8 to about 8 cm.
- 35. (Previously presented) The polymeric balloon of claim 26 having a length of about 1.5 to about 3 cm.

- 36. (Previously presented) The polymeric balloon of claim 26 having an uninflated wall thickness of about 0.1 to about 0.4 mm.
- 37. (Previously presented) The polymeric balloon of claim 26 having an uninflated wall thickness of about 0.2 mm.